6. (New) The method of claim 5, wherein said anti-aggregation molecule is a monoclonal antibody.

7. (New) The method of claim 5, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

8. (New) The method of claim 5, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

9. (New) The method of claim 5, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

10. (New) The method of claim 5, wherein said subject suffers from Alzheimer's disease.

11. (New) An agent for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the agent comprising an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

12. (New) The agent of claim 11, wherein said anti-aggregation molecule is a monoclonal antibody.

13. (New) The agent of claim 11, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

14. (New) The agent of claim 12, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

15. (New) The agent of claim 11, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

16. (New) A pharmaceutical composition for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the pharmaceutical composition comprising, as an active ingredient, a therapeutically effective amount of an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, the pharmaceutical composition further comprising a pharmaceutically acceptable carrier.

17. (New) The pharmaceutical composition of claim 16, wherein said anti-aggregation molecule is a monoclonal antibody.

18. (New) The pharmaceutical composition of claim 16, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

19. (New) The pharmaceutical composition of claim 16, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

20. (New) The pharmaceutical composition of claim 16, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

21. (New) A method of preventing or reducing aggregation of an aggregating protein or of disaggregating preaggregated aggregates of said aggregating protein, the method comprising the step of administering to a subject a therapeutically effective amount of an expression vector encoding, in an expressible form, an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, thereby preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

22. (New) The method of claim 21, wherein said anti-aggregation molecule is a monoclonal antibody.

23. (New) The method of claim 21, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

24. (New) The method of claim 21, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

25. (New) The method of claim 21, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

26. (New) The method of claim 21, wherein said subject suffers from Alzheimer's disease.

27. (New) An agent for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the agent comprising an expression vector encoding in an expressible form an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

28. (New) The agent of claim 27, wherein said anti-aggregation molecule is a monoclonal antibody.

29. (New) The agent of claim 27, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

30. (New) The agent of claim 27, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

31. (New) The agent of claim 27, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

32. (New) A pharmaceutical composition for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the pharmaceutical composition comprising, as an active ingredient, a therapeutically effective amount of an expression vector encoding in an expressible form an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, the pharmaceutical composition further comprising a pharmaceutically acceptable carrier.

33. (New) The pharmaceutical composition of claim 32, wherein said anti-aggregation molecule is a monoclonal antibody.

34. (New) The pharmaceutical composition of claim 32, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

35. (New) The pharmaceutical composition of claim 32, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

36. (New) The pharmaceutical composition of claim 32, wherein said aggregating protein is selected from the group consisting of carboxypeptidase

A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

37. (New) A method of preventing or reducing aggregation of an aggregating protein or of disaggregating preaggregated aggregates of said aggregating protein, the method comprising the step of administering to a subject a therapeutically effective amount of cells expressing an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, thereby preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

38. (New) The method of claim 37, wherein said anti-aggregation molecule is a monoclonal antibody.

39. (New) The method of claim 37, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

40. (New) The method of claim 37, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

41. (New) The method of claim 37, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

42. (New) The method of claim 37, wherein said subject suffers from Alzheimer's disease.

43. (New) An agent for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the agent comprising cells expressing an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

44. (New) The agent of claim 43, wherein said anti-aggregation molecule is a monoclonal antibody.

45. (New) The agent of claim 43, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

46. (New) The agent of claim 43, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

47. (New) The agent of claim 43, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

48. (New) A pharmaceutical composition for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated

aggregates of said aggregating protein, the pharmaceutical composition comprising, as an active ingredient, a therapeutically effective amount of cells expressing an anti-aggregation molecule, said anti-aggregation molecule being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, the pharmaceutical composition further comprising a pharmaceutically acceptable carrier.

49. (New) The pharmaceutical composition of claim 48, wherein said anti-aggregation molecule is a monoclonal antibody.

50. (New) The pharmaceutical composition of claim 48, wherein said anti-aggregation molecule is a genetically engineered antigen binding fragment and of an antibody.

51. (New) The pharmaceutical composition of claim 48, wherein said anti-aggregation molecule is a single chain monoclonal antibody.

52. (New) The pharmaceutical composition of claim 48, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

53. (New) A method of preventing or reducing aggregation of an aggregating protein or of disaggregating preaggregated aggregates of said aggregating protein, the method comprising the step of administering to a subject a therapeutically effective amount of an antigen being derived from said aggregating

protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, thereby preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

54. (New) The method of claim 53, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

55. (New) The method of claim 53, wherein said subject suffers from Alzheimer's disease.

56. (New) An agent for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the agent comprising an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

57. (New) The agent of claim 56, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin,

bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

58. (New) A pharmaceutical composition for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the pharmaceutical composition comprising, as an active ingredient, a therapeutically effective amount of an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, the pharmaceutical composition further comprising a pharmaceutically acceptable carrier.

59. (New) The pharmaceutical composition of claim 58, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

60. (New) A method of preventing or reducing aggregation of an aggregating protein or of disaggregating preaggregated aggregates of said aggregating protein, the method comprising the step of administering to a subject a therapeutically effective amount of an expression vector encoding, in an expressible form, an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said

aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, thereby preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

61. (New) The method of claim 60, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

62. (New) The method of claim 60, wherein said subject suffers from Alzheimer's disease.

63. (New) An agent for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the agent comprising an expression vector encoding, in an expressible form, an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

64. (New) The agent of claim 63, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related

pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

65. (New) A pharmaceutical composition for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the pharmaceutical composition comprising, as an active ingredient, a therapeutically effective amount of an expression vector encoding, in an expressible form, an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, the pharmaceutical composition further comprising a pharmaceutically acceptable carrier.

66. (New) The pharmaceutical composition of claim 65, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

67. (New)0 A method of preventing or reducing aggregation of an aggregating protein or of disaggregating preaggregated aggregates of said aggregating protein, the method comprising the step of administering to a subject a therapeutically effective amount of cells expressing an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being

capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, thereby preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

68. (New) The method of claim 67, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

69. (New) The method of claim 67, wherein said subject suffers from Alzheimer's disease.

70. (New) An agent for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the agent comprising cells expressing an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

71. (New) The agent of claim 70, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

72. (New) A pharmaceutical composition for preventing or reducing aggregation of an aggregating protein or for disaggregating preaggregated aggregates of said aggregating protein, the pharmaceutical composition comprising, as an active ingredient, a therapeutically effective amount of cells expressing an antigen being derived from said aggregating protein and being capable of eliciting anti-aggregation antibodies, said anti-aggregation antibodies being capable of binding to a bioactive native or an aggregated form of said aggregating protein with a high binding constant, being non-inhibitory to the biological activity of said aggregating protein and being capable of preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, the pharmaceutical composition further comprising a pharmaceutically acceptable carrier.

73. (New) The pharmaceutical composition of claim 72, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone, releasing hormone, somatostatin N-Tyr and β-amyloid.

74. (New) A pharmaceutical composition comprising an agent effective to induce an immunogenic response against β-amyloid in a patient, and a pharmaceutically acceptable adjuvant.

75. (New) The pharmaceutical composition of claim 74, wherein the agent is β-amyloid or an active fragment thereof.

76. (New) A method of preventing or treating a disease characterized by amyloid deposit in a patient, comprising the step of administrating an agent effective to induce an immune response against a peptide component of an amyloid deposit in the patient.

77. (New) The method of claim 76, wherein the amyloid deposit comprises aggregated β-amyloid peptide.

78. (New) The method of claim 76, wherein the patient is a human.

79. (New) The method of claim 76, wherein the disease is Alzheimer's disease.

80. (New) The method of claim 76, wherein the agent comprises β-amyloid peptide or an active fragment thereof.

81. (New) The method of claim 76, wherein said agent is an antibody to β-amyloid which induces an immune response by binding to β-amyloid in the patient.

82. (New) The method of claim 76, further comprising screening a library of compounds to identify a compound reactive with antibodies to β-amyloid, and administering the compound to the patient to induce the immune response.

83. (New) The method of claim 76, wherein the agent is an effective dose of a nucleic acid encoding β-amyloid or an active fragment thereof, whereby the nucleic acid is expressed in the patient to produce β-amyloid or the active fragment thereof, which induces the immune response.

84. (New) A method of preventing or treating Alzheimer's disease comprising administering an effective dose of β-amyloid peptide to a patient.

85. (New) Use of β-amyloid peptide, or an antibody thereto, in the manufacture of a medicament for prevention or treatment of Alzheimer's disease.

86. (New) A pharmaceutical composition comprising an agent effective to induce an immunogenic response against β-amyloid in a patient with the proviso that the composition is free of Complete Freund's adjuvant.

87. (New) A composition comprising a viral vector encoding β-amyloid or a fragment thereof effective to induce an immune response against β-amyloid.

Respectfully submitted,

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